In response to the Notice to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and or Amino Acid Sequence Disclosures, dated 21 June 2001, Applicants provide herewith an initial CRF, as requested in the Notice.

Applicants further submit a substitute paper copy of the Sequence Listing as provided under 37 C.F.R. §1.825 to update the Sequence Listing and to correct minor typographical errors uncovered by Applicants during the preparation of this paper. Specifically, Applicants have amended the "General Information" of the Sequence Listing to record the assigned "Current Application Number", and to delete the optional "Software" data entry. Applicants have also corrected typographical errors, replacing "gly" with "Gly,"; inserting a comma between "Leu" and "Pro"; and replacing "Ph" with "Phe" and "Net" with "Met" (as demarcated on Mark-up sheets 1, 2, and 3, respectively, provided herewith). These amendments cure obvious typographical errors. No new matter is introduced by these amendments.

As required under 37 C.F.R. §1.825(b) and §1.821(e), Applicants provide herewith the Sequence Listing in CRF. Applicants further provide herewith statements required under 37 C.F.R. §1.821(f) and (g) that the paper copy and computer readable form of the Sequence Listing are the same in content, and contain no new matter.

In view of the foregoing amendments and remarks, Applicants believe that their application is in compliance with the requirements for patent applications containing nucleotide sequence and/or amino acid sequence disclosures, and is in condition for allowance. Examination of the present application on the merits and allowance of the pending claims are, therefore, respectfully requested.

Respectfully submitted,

Leon R. Yankwich; Registration No. 30,237

Kenneth P. Zwicker, PhD; Registration No. 43,310

Attorneys for Applicants

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## CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as First Class Mail, postage prepaid, in an envelope addressed to the Asst. Commissioner for Patents, Washington, D.C. 20231 on the date indicated below.

ily 23, 2001

Stephanie L. Leicht



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THEOREM DISTRICT

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on the fitting little to the
      llamer, Febert it
+ 1200 FINEING FERTIFES FOR CARCINGERBRYONIC ANTIGEN (CEA
+16 ≥ Jequence Listing DYX-016.0 US
<1408 03/641,345 [(not yet assigned)] <141.7500-04-03
2180. 100
[<10 Patentin Ver. 2.1]
<210. 1
:011: 16
:212: PRT
<213: Artificial Sequence</pre>
:223: Description of Artificial Sequence: CEA binding
      polypeptide
<220:
<2210 VARIANT
(2222) (1)
<2233 Xaa is Asn, Asp or is absent
<2210 VARIANT
1... 1: VAPIANT
12022 (3)
<2230 Xaa is Asp, Phe or Val
<2.201
<221> VARIANT
<222> (5)
<223> Xaa is Asn, Glu or Met
<2210
<2210 VARIANT
<0120 = 6)
<223> Waa is Asn, Leu, Met or Phe
-220≥
-220≥ CARTANT
Place Maa is Asp. Gly, Ile, Lys, Phe or Thr
K.V.A
K.VIA WAPIANT
KAVAY (8)

Killed Maa is Ala, Gln, [gly] Gly, Lys or Thr
```

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Source Manager Arty, Astron. Aspy. (1948) 1917
COLOR MARIANT
ka.kk if.
kilisk Maa is Gim, Leu or Gip
<220>
<221> VARIANT
<222> 111)
<2232 Kaa is Ala, Trp or Tyr
<220>
<221> VARIANT
VALL V - 17
V273 - Mas is A'a, Gly, His, Phe, Thr or Val
< Z20>
<221> VARIANT
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<223> Xaa is Asn, Gln, Phe, Ser or Val
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<221: VARIANT
<222> (15)
<223> Xaa is Arg, Leu_ Pro or Ser
 <2200+
<221: VARIANT
<222: '16'
<223: Xaa is Lou, Ser, Trp or Tyr</pre>
 <400. 1
 Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa
 <210.12
 <211: 16
<212: PRT
<213: Artificial Sequence
 %313> Description of Artificial Sequence: family of
       preferred CEA binding modeties
 Pinie VARIANT
Philip (1)
Philip Xaa is Ash or Asp
 - ... - WARIANT
```

```
ore Maarin [In] <u>ine</u>, Met, Ielor Adm
 eller Kaarli Agy, Ay, Lie, Lyb, Aberdr Ind
House Maaris Ard, Ast., Asp., With Gry or Trp
* 227 * VARIANT
* 227 * VARIANT
* 227 * 727
-2.3 - Maa is Ala, Gly, His, Phe, Thr, Tyr or Val
 2. 2 - Xaa is Arg, 100, Pro or Ser
+1.00 +
+2/1 + VARIANT
+2/2 + 10)
<223> Maa is Leu, Ser, Trp or Tyr
+416+2
Mas Trp Val Cys Glu Maa Maa bys Maa Glr. Trp Maa Cys Asr. Maa Maa
                                          16
+ 210 + +
+ 211 + 10
+ 212 + EBT
Azisz Artititial Sequence
*213> Description of Artificial Sequence: CEA binding
      qee i
el le l
ellige waar staan, Nig on Mon
TOURS OF STAR SANS
Halles Haa is Ash, Leu, [Not] Met or the
House Man is Asp, Ely, Ile, Lys, The or Thr
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